Little Vermilion River Project
Final Report

June 1995

Purpose:

This is a joint effort between The Nature Conservancy, Illinois Department of Conservation and the Illinois Nature Preserves Commission to contact landowners along the Little Vermilion River between the Georgetown reservoir and the Indiana state line for the purpose of informing landowners of the high quality of the river along their property and exchanging ideas regarding land management, natural history, geology, and local historical landmarks.

Goal:

To encourage and foster responsible landowner stewardship of the river and corridor by identifying good land management efforts, addressing potential problems and suggesting environmentally sound solutions.

Project term:

1 year beginning April 1994

Project Director:

Suzanne Smith

5t05

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I. Project Research and Development

At the onset of this project, I accumulated biological data and familiarized myself with local attitudes. A review of studies on Illinois stream diversity including Biologically Significant Illinois Streams (Page et. al. 1992) and A Biological Survey of the Little Vermilion River (Sauer 1989) provided excellent information on endangered fish and mussels, hydrology and water quality. Field biologists have sampled the river identifying three fish species and two mussel species as endangered in Illinois. An ongoing survey of bats has identified the federally endangered Indiana Bat, *Mytois sodalis,* as using parts of the stream corridor. It remains the only known endangered mammal of the Little Vermilion River corridor.

Geologic history is also significant. Analyzed rock samples I recovered from the Little Vermilion River revealed sideritic concretions within the shale outcroppings and in the stream bed. Fossil plants and animals in sideritic concretions from the Francis Creek Shale member of the Carbondale Formation (Pennsylvanian) near Mazon Creek, referred to as the Mazon Creek flora and fauna, are world renowned (Lamar and Hester 1972). Sideritic concretions found along the Little Vermilion River bear a striking resemblance to those found along Mazon Creek. Within these Mazon Creek-type fossil asemblages along the Little Vermilion, unique three-dimensional preservation of plant organs and soft animal tissue have been found (Baird *et al.* 1985). Significant animal specimens from the Little Vermilion River are included in the invertebrate paleontology collection of the Field Museum, Chicago.

1988 aerial photos from the Illinois Department of Transportation (IDOT) (Exhibit A) and 1937-1940 aerial photos of the Little Vermilion River watershed provide visual data concerning strip mining locations, agricultural practices, and the extent of the riparian corridor. Strip mining dates back to the early 1900's altering the topography within the watershed creating ridges, sloughs, and ponds.

Of significance to this project is the prior interest in the development of a new reservoir proposed for the city of Georgetown on the Little Vermilion River. I reviewed the Illinois Nature Preserves Commission (INPC) files regarding this issue to acquaint myself with the local history of the government plan for development, correspondence with local residents through editorials or personal letters to the INPC, and actions taken to date. The dedication of the Carl Fliermans River Nature Preserve within the proposed reservoir site in 1990 has virtually eliminated the possibility of a reservoir. Part of this project is to determine the attitudes of landowners within the Little Vermilion corridor toward this type of habitat protection.

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https://archive.org/details/littlevermilionr00smit

Conclusions

There is an abundance of information on the vertebrate and invertebrate aquatic life of the river. However, I found it difficult to locate data on the flora in the river and along the riparian corridor. Bankside land cover data was available from the Illinois Streams Information System (ISIS) and provided some information on the Little Vermilion River and its tributaries. This data gave me an overview of the natural and agricultural vegetation within the riparian corridor but did not provide specific information regarding species of woody or vascular plants. It seems that there is little information available on plants related to small river systems in Illinois. Most biological river studies I found seemed to emphasize the vertebrate and invertebrate communities within the river rather than the aquatic vegetation associated with it.

Possible strip mining and channelization from previous coal mining operations along the river was never fully addressed. Comparison of the 1937 and 1988 aerial photos of the project area indicate no drastic changes to the stream channel, but further investigation could be done in this area. Peabody Coal lands were surveyed by a representative of the INPC and a DOC District Heritage Biologist.

Regarding the altered topography due to the previous strip mining operations, I have concluded that recommendations to landowners regarding land use of these unnatural landforms is site-specific. Determination of proper land management does require close scutiny of the area while at the same time tailoring the restoration recommendations to the landowner's goals. If there is no threat to the river, I think it is better to leave the area undisturbed rather than to attempt any restoration which might ultimately cause more harm than good.

With regard to the interpretation of the biological significance of the stream to landowners, I think it would be helpful to have evidence of a highly degraded stream for comparison when making contact. I have found it difficult to convince most of the long-time residents that their local stream is one of the best in the state of Illinois due to evidence of trash, the existing reservoir altering the stream, low flow during the summer, and muddy waters. I also found that I had to teach them to rethink the idea of what a good stream could be beyond the image created through media and society. The image of the stereotypical stream as crystal clear, fast flowing, and deep must be eliminated and replaced with the understanding of natural and healthy environments that may not appear pristine. Educational materials for this purpose were not developed during this project, but I would highly recommend them for future landowner contacts along streams.

Discussion regarding the reservoir was generally very cordial and open. While most landowners were either indifferent or resolved to the fact that the issue is dead and realize the reservoir would not boost the economy for the city of

Georgetown, I did find that there was more awareness of the proposed reservoir within the reservoir project area. Within the proposed reservoir site, more landowners had strong opinions favoring or opposing the project.

Most landowners are aware of the dedication of the nature preserve and understand that it has prevented the development of the reservoir. Within the river corridor there is some unease as to *why* the nature preserve was created and by whose authority it was done, but I explained that what they view as government intervention is actually landowner's rights which they also possess.

II. Land Management Options and Tax Incentives

I compiled pertinent land mangement options and tax incentives from the Vermilion County Agricultural Stabilization and Conservation Service (ASCS) and Natural Resources Conservation Service (NRCS; formerly the Soil Conservation Service), DOC, INPC, U.S. Department of Fish and Wildlife, Vermilion County Tax Assessor's office and local private organizations. From this information I created a chart of management options to use as a reference guide (Exhibit B). This was an ongoing process as I continued to read and learn more about land management options and kept abreast of continually changing government programs. As an intermediary or referral service I tried to advise and direct landowners to the proper experts for their land management needs. I did feel responsible for their concerns and followed up with local offices providing land management services to see that any referrals were processed.

Conclusions

At the onset of this project I was surprised to find there was not a better system for locating current information on land management options and felt rather inadequate to deal with so many programs. During the course of this past year I did receive a publication from the Illinois Natural Resources Coordinating Council entitled Landowners Guide to Natural Resources Management Incentives (Exhibit C). Most landowners were aware of the confusion regarding government programs for land management and were generally satisfied with their current land practices or were not interested in dealing with the hassles. Few adopted a new management approach but they were interested in discussing tree planting and identification, buffer strips, landfill laws, and floodplain management. The NRCS office was very helpful in providing cost/share information on various programs they offer and were interested in using programs beneficial to riparian areas.

III. Landowner Packets

I created a packet for each landowner to provide simple and concise information concerning this project (Exhibit D). The information was brief and colorful to provide interesting and pertinent facts about the project including:

1. plat map
2. Little Vermilion River project article from The Conservator
3. endangered species fact sheets
4. endangered species of Illinois brochure from Illinois DOC
5. riparian zones article from The Illinois Steward
6. registry information
7. Big Darby River article from Nature Conservancy- a success story

I used this packet as the format for my discussion about the Little Vermilion River with landowners. Beginning with the plat map highlighting the landowners property, I confirmed their land holdings and address. The Nature Conservancy (TNC) article gave both the project and me credibility and brought us to discussion of the river. The fact sheets and endangered species brochure provided information about the biological significance of the stream. This lead into the riparian corridor article which I used as an opportunity to explain the significance of their property as a unique and rare land form in Illinois that should be protected through good land stewardship. Land management may have been discussed here, but more often took place in the field while observing the site. At this point, I had a fairly good idea of the landowners interests and proceeded to discuss the registry program. I did not push for commitment during the first contact but encouraged them to consider it in the hope that as they come to know me better through phone calls and visits, they would feel comfortable with the registry program and trust my recommendations. I closed our discussion with the success story of a similar project on the Big Darby River in Ohio.

Conclusions

At the onset of this project it was debated whether or not to publicize this project due to the possible recourse from the reservoir issue on the Little Vermilion River. A brief article was written for The Conservator which was most helpful in providing both the project and myself credibility to the landowners. Interestingly, 57% of the landowners were not familiar with TNC, 13% had at least heard of the organization, and for the remaining 30% awareness of TNC could not be determined for various reasons. Regardless of the landowner's awareness of TNC however, the publicity was extremely effective.

It had been suggested that a river fact sheet be added to this packet. An outline of facts on water quality and comparisons to other Illinois streams might help landowners appreciate the significance of the Little Vermilion and encourage them to provide the best stewardship possible. This was not accomplished during this project but would be worth development for future landowner contacts along streams. Information on stream degradation is available through the Illinois State Water Survey.

IV. Confirm Landowners

Landowners were chosen based on their proximity to the river. Only parcels between the Georgetown reservoir and Indiana state line and adjacent to the river were considered for this project. After identifying landowners and parcels within the Little Vermilion River corridor on a Vermilion County plat map, I confirmed all tracts within the project area by checking tax records at the Vermilion County tax assessors office. Deaths, land sales, public easements, and small tracts were responsible for any discrepencies in the tax record. Further inquiries with family members or neighbors generally provided the necessary information to locate the current landowners. There were forty-four parcels to be evaluated (Exhibit E).

V. Site Overview

A canoe trip was taken May 31, 1994, to observe the project area. The trip began at the existing reservoir near Route 150 and concluded at the bridge southeast of the confluence of the Yankee Branch. Participants included Michael Reuter, Central Illinois Field Director of TNC; Mary Kay Solecki, Central Illinois Field Represenitive of the INPC; Jim and Eleanor Smith, Illinois Audubon representatives; and myself.

The purpose of this trip was to view and evaluate the project area. Visiting the site gave us a better understanding of the current land use practices, allowed us to see first hand the significant features of the stream including the existing nature preserve, and gave us the opportunity to locate any areas which would require special attention when visiting landowners. Photos and slides were taken and notes were kept of significant features or sightings.

Conclusion

Before completion of this project, I had hoped to canoe the project area once again at the end of the term to confirm information received from landowners and biologists, but this was not accomplished. However, on May 15, 1995, I canoed from the previous stopping point on the Little Vermilion River downstream of the Yankee Branch to the Wabash River to observe the rest of the stream, the riparian corridor, and land use practices downstream of the project area (Exhibit F). The river appears much the same as in Illinois without noticably increasing in width or depth. Similar shale outcroppings, periodic high bluffs, riffles and pools, and gravel bars are present. The riparian corridor remains intact, but there is a moderate increase in agricultural practices closer to the stream. There is a significant increase in the number of log jams but no evidence of increased erosion to the banks. A levee is present on the north side of the Little Vermilion River begining above Newport, Indiana, and extending to the Wabash River. The levee is approximately 4 feet at Newport increasing to approximately 10 feet one mile upstream of the confluence of the Wabash River. This large levee holds back flood waters from an 800 acre field owned by one of the landowners within the project area. Mrs. Mary Jo Hegarty stated that her family built these levees for flood control. As the river flows past the north end of Newport, there is an obvious strong odor of sewage and piles of trash along the south bank. The most abundant wildlife sightings included over 100 soft shelled turtles and numerous wood duck broods.

VI. Registry Development

After working jointly with the Peoria office of TNC, a brochure, signs, and certificate have been developed for the Little Vermilion River Registry Program (Exhibit G). The format and content parallel the Peoria Wilds Registry Program including a brochure of registry information, signs for public display, and a framed certificate of recognition. TNC has already developed material for their registry program at Peoria Wilds, and were willing to edit their material to accommodate the needs of this project. The brochures, signs, and certificates for the Little Vermilion Registry were funded solely by TNC.

Distribution of the signs and certificates occurs when an area qualifies for the registry and after verbal commitment by the landowner. Signs and certificates are presented to the landowner as recognition for their good stewardship.

For the duration of this project, this registry program replaced the Natural Heritage Landmark Program of the DOC's Division of Natural Heritage as the recognition program for good land stewardship along the Little Vermilion River. This was not, however, the only option being presented to the landowner. Item III reviews other management options I considered appropriate for this project and for presention to landowners during our discussions.

At present, four landowners have enrolled in the registry and at least six other families are seriously considering participation. If contact is maintained with these landowners, I feel confident that they will consider the registry program in the future.

Conclusion

The registry could be one of the more popular choices of landowners when considering conservation and land management because it is legally non-binding and requires no change in current management practices. Overall, it seems evident that landowners are hesitant to participate because:

1. they realize they will be on a list.
2. there is no real incentive to participate.
3. they are unaware of the sponsoring agency (only 13% have some awareness of TNC, the sponsoring agency)
4. they are concerned that involvement with the register may lead to government intervention (TNC is perceived as a governmental agency).
5. they do not want to make a quick decision.

I feel that a sign and a piece of parchment is insufficient if we want landowners to believe that we, the conservation agencies, consider this area and their stewardship significant. Based on ideas from the Missouri Department of Conservation (MDC) concerning riparian management, it appears there is great success being made through coordinated efforts of individuals within watersheds. Task force groups which are commonly referred to as "stream teams"are developing from active individuals who volunteer to maintain communication with MDC and local citizens through newsletters, public meetings, and editorials. They also initiate projects to monitor, maintain, or improve riparian sites including water quality monitoring stations and clean-up crews similar to adopt-a-highway programs.

This registry must be only the beginning of a commitment of both the landowners along the Little Vermilion River and the conservation agencies. What can I offer them beyond the recognition? I think it boils down to warm bodies. Someone must be willing to take charge of this significant area, the stewards within it, and maintain communication between the conservation agencies and the landowners for a long time. Someone must also provide leadership in conservation and land management practices and coordinate these ideas.

From the landowners side, enrolling either a progressive farmer or someone who is well-respected in the community will provide the momentum for many landowners within the project area to seriously consider participation in the registry. At this time, I do not feel any of the current landowners enrolled in the registry will be strongly influential within the project area, but I do think their enrollment will be realized in the community and may eventually help others to consider their land as a significant part of Illinois' natural beauty.

From the standpoint of the conservation agencies, field personnel must continue to work directly with the landowners by becoming well-acquainted with the landowner's operation before giving advice, being sensitive to their needs when suggesting stream management, and being prepared with up-to-date technical assistance and information.

And finally, how does the registry fit in with other habitiat protection tools? In the case of a landowner who has already provided the ultimate protection by dedicating land as a nature preserve, do we still request registry enrollment? How will the registry be incorporated into the process of land preservation? I suggest it be included along with other protection practices. It will provide ongoing communication between the landowner and the conservation agencies and can therefore be the link between the various land management practices within any protected area.

VII. Landowner Contact

Landowner summary reports were filed for all landowners within the project area (Exhibit H- filed with the sponsoring agencies).

Of the forty-four landowners contacted, nineteen are grain farmers or grain and livestock farmers, three are livestock farmers using the land only for pasture or hay, and twenty-two are non-farming.

Five landowners never responded to inquiries by letter or phone. At the end of this project, when no further attempts to contact the landowner could be made, a packet was mailed to their address in the hope they would read the information and be more likely to respond to any inquiries in the future. One of these five parcels is currently being held for back taxes and is likely to go up for sale in September 1995.

One parcel had already been sold to another landowner within the project area. Five parcels are not adjacent to the stream. Four of these parcels are affected by Illinois Department of Transporation easements surrounding the newly constructed Humrick Road bridge (Exhibit I). These easements have detached two parcels from the river. I recommend they remain on the project because they are still very close to the Little Vermilion River and their farming practices will impact the stream.

I recommend that some of these landowners be left on the project and some be deleted, depending on their location and future plans with respect to the stream (Exhibit J).

One landowner was interested in renovation of a bottomland strip mine pond. U.S. Fish and Wildlife was called in to view the site. It was the recommendation of the U.S. Fish and Wildlife service representative and myself not to alter the pond because of soil type, location in the flood plain, and drainage. The landowner has decided to leave the area undisturbed. Another bottomland was bulldozed in 1994 to remove willows between two farm fields. Pending a possible land sale, no recommendations were made at this time but the site should be reviewed in the near future to determine ownership and future management plans.

Four landowners have received information related to tree management practices. This included information on ACP cost/share for tree planting, a 7 year CRP pruning plan, possible reinstatement of an abandoned CRP tree planting plan, and identifying trees and tree diseases.

One landowner was encouraged to consider ACP cost/share for riparian buffer strips because he was interested in expanding his riparian corridor. Four other landowners were identified as needing wider buffers between their farm fields and the stream.

Two landowners currently have old landfills on their property. Landfill regulations were sent to one landowner to help him understand his responsiblities. The other landowner was contacted verbally to discuss his rough livestock operation at the abandoned landfill site. E.P.A. records show this landfill to be legally closed.

Two landowners have been very interested in the endangered bats along the corridor. A mammologist at the Natural History Survey who surveyed bats along the Little Vermilion has provided information regarding bat species in the area. Her article was given to three landowners including one who farms at one of the netting sites and another landowner who is a wildlife rehabilitator.

Snakes have been a frequent topic of discussion with some concern about the possibility of poisonous snakes in the area. One landowner was sent information on poisonous snakes of Illinois.

Five landowners reside in Indiana. Information was provided by TNC of Indiana and forwarded to one landowner who requested this information.

The 100 foot buffer strip was not being maintained by the landowner farming Mrs. Fliermans property on the east side of the river. He was informed of the requirements regarding the nature preserve and will maintain the 100 foot buffer in the future.

Because of the terrain, there is a fair amount of livestock pastured along the Little Vermilion. One site stands out as significantly overgrazed creating an increased sediment load into the two tributaries flowing into the stream. Discussion with the landowner regarding improved land management included reducing the size of the herd, limiting the range of the herd, and creating holding ponds to collect surface runoff.

One landowner has maintained terraces to reduce runoff into the stream. The new tenant was contacted and encouraged to mainain these terraces as good management along a stream.

A few of the sites in the project area may not be properly connected to a septic or sewage system. It is my recommendation that these areas (noted in the landowner summary reports) be tested by the Department of Public Health to ensure that proper sewage treatment is maintained along the Little Vermilion River corridor.

Exhibit K includes letters and forms that were used throughout the landowner contact process. Each contact began with a letter of introduction followed by a phone call to set up a visit, preferrably at the site (not all landowners live on their property by the river). During the visit, I presented the packet of information and, if possible, walked the site with the landowner to see the river and discuss land management practices. I used a notepad to take notes of our discussions with the consent of the landowner. Immediately after the visit, I tried to find a place to pull off the road to record important information on a cassette tape. This information was used as a reference later in my office when filling out the landowner summary report. I always concluded my first contact with a hand-written thank you note. At this point, the relationship between the landowner and me had just begun.

Follow-ups have occured by phone, letter, or continued visits depending on the landowner and the information being transferred. Most of my suggestions were made after review of the landowner's situation, and after I had checked information regarding land management techniques, program specifications, or copied pertinent documents for their information. Two sites within this project have had previous contact by Mary Kay Solecki of the INPC. Beyond the term of this project she will continue to be the primary field representative for these landowners.

Conclusions

While developing my letter of introduction, it was difficult to decide how to present myself as I was under the direction of three different agencies; the DOC, the INPC, and the Illinois chapter of TNC. Being an independent contractor , it was decided by TNC, INPC and myself that I should use TNC letterhead when writing the letter of introduction to the landowners to provide both the project and myself credibility. I came to the conclusion that it was necessary for me to represent myself independently. From the legal standpoint, my contract with TNC states, "The contactor is not to be considered an agent or employee of the Conservancy for any purpose...". It was easier for landowners to identify me through my correspondence if my business card and stationary were alike. I developed my own stationary that is consistent with my business card.

I chose to approach the Little Vermilion River from east to west to delay any potential conflict with landowners surrounding the proposed reservoir site until later into the project. There was virtually no direct conflict due to my presence within the reservoir site or along the river corridor to the east. Within the proposed reservoir area there were landowners with strong feelings favoring or opposing the project, but in most cases it did not interfere with discussion about the Little Vermilion River.

With regard to landowner contact, I feel I must mention one concern. As a female out in the field alone, I sometimes found myself in uncomfortable situations. This may be considered a hazard of my occupation to be dealt with as the situation arises, but I wonder if it needs to be addressed for female employees in the future.

Overall, I was warmly received by the landowners along the Little Vermilion River, and I was pleasantly surprised at the sincere interest they took in my work. They were most helpful in providing information about the river and were generally very willing to discuss good management practices for the benefit of the stream. I believe that these people who live and work around the river really do care about the stream. It may be that the educational process regarding the environmental issues surrounding the Little Vermilion River will require patience and a little perserverence. Few of us change overnight.

VIII. Project Finale

One year after the onset of this project, it was my intention to hold a workshop to provide landowners an opportunity to gather together and celebrate the river. I saw this as a time to say thank you to all of the people who had given of their time to share their knowledge and care for this special stream. Due to unforseen circumstances, this event did not occur during the term of this project. If this type of event is considered within the next few years, I would suggest a Saturday during Illinois Streams Appreciation Month in June. The Carl Fliermans River Nature Preserve would be a very appropriate location and would allow many landowners an opportunity to spend time at a protected natural area in their neighborhood that they may have only heard about. It would be a time to invite landowners and their families to come and experience this unique natural area. It would be appropriate to include stream biologists to identify significant fish and mussels from the stream bed, geologists to discuss the unique rock formations and identify fossils and other rock samples, stream tables to show cause and effect of riparian land use, a mammologist to discuss bat habitat and sampling techniques, and a botanist to identify plants and discuss the benefits of the riparian corridor vegetation. Representatives from the three sponsors of this project and local personnel who have supported the project with their technical advice should also be present.

It would also be an appropriate time to recognize registry participants for their good stewardship and allow one or more of the landowners to share their interest in the registry with the group. It would also provide the sponsoring agencies a chance to speak to the public if they so choose.

IX. Follow-up

It will be necessary to move beyond the initial term of this project and continue to provide assistance to the landowners and the river. Following is my list of considerations for future management of the Little Vermilion River.

a. As an outcome of the registry, some type of communication should be maintained. This could be in the form of an annual newsletter to provide landowners with information, including events occuring within the stream corridor related to this project.

b. Landowners should be contacted every three to five years to confirm current landowners and monitor land management practices.

c. Select a land manager. Either a site steward, part-time person, or other should be available to provide technical advice if needed, be the link between the conservation agencies and the landowners, and provide the management suggested in items (a) and (b) above.

d. Land purchases should be considered when funds and suitable sites become available. If land is purchased by the state, however, it would be more favorable to allow public access to these areas rather than restrict their use, unless a significant species or habitat is threatened.

e. Expand the project to include other portions of the stream or its tributaries. Yankee Branch and Ellis Branch would be the main tributaries of the Little Vermilion River within this project that bear further investigation.

f. It is evident that there are changes occuring in the watershed beyond the corridor that are adversely effecting the quality of the Little Vermilion River. There is sediment being deposited along the bank in the river just west of the Peabody Coal lands. Upstream of this deposit is a small tributary which appears to drain farmland north of the river. I would suspect field runoff as the source of this sediment load in the stream. Proper sewage treatment is another problem that should be addressed. Perhaps the Department of Public Health should be notified to test water samples from tiles draining subdivisions and private homes along certain portions of the Little Vermilion River.

g. Consider various media to educate the public and promote good stewardship along the Little Vermilion River corridor. Include newspaper and magazine articles and possibly television reports to promote the goals of this project. This should be handled carefully however, considering the recent history along the stream. Articles should aim to educate the public in a positive manner. Attempts should be made to include local success stories and personal experiences along the river rather than outside views of stream management to avoid the appearance of outsiders forcing new ideas onto the community.

h. Create videos of stream management techniques to be used by field representatives when contacting landowners.

Much is being done in the area of stream management within many states across the United States. Communication between other conservation agencies should remain open so that we may continue to learn from each other. And let us try to remember to balance the urgency of our task with the needs of the landowners in order to reach our goal of preservation for perpetuity together.

APPENDIX

EXHIBIT A

1988 Aerial Photo of the
Little Vermilion River Project Area

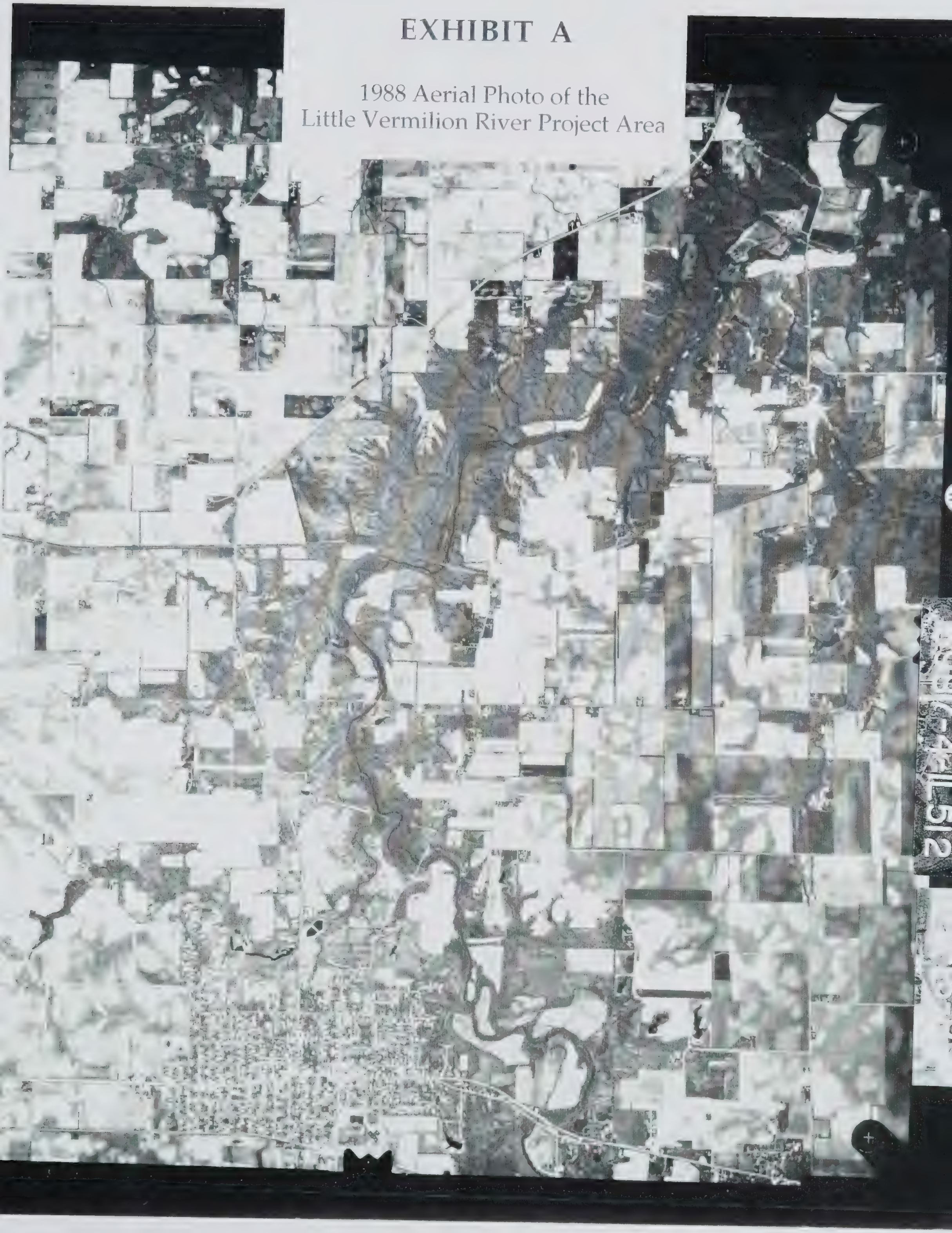

EXHIBIT B

Landowner Options Guide

LANDOWNER OPTIONS GUIDE FOR PROTECTION OF PROPERTY

ILLINOIS NATURE PRESERVES COMMISSION

- Natural Areas Registry
- Nature Preserve Dedication

U.S.D.A.
S.C.S.
A.S.C.S.
(Vermilion County)

- Stewardship Incentive Program (S.I.P.)
  9 options currently available, working jointly with I.D.O.C.
- Agricultural Conservation Program (A.C.P.)
  12 options currently available
- Conservation Reserve Program (C.R.P.)
  working jointly with I.D.O.C.
- Wetlands Reserve Program (W.R.P.)
  working jointly with U.S. Fish and Wildlife

ILLINOIS DEPARTMENT OF CONSERVATION

- Forestry Development Cost/Share programs
- Acres For Wildlife
- accepting donated conservation easements
- possibly purchasing conservation easements

OTHER OPTIONS

- Sale or donation to a conservation organization
- Title Restrictions
- Mutual Covenants, Management Agreements, and Leases
- Conservation Easements

TAX INCENTIVES

*land donation to private organization
(property and income tax reductions)

* financial donations to private organizations
(income tax reductions)

* conservation measures
(property tax reductions)

1. open space assessment
2. forestry management plan

PRIVATE ORGANIZATIONS

providing materials, labor, purchasing funds

* Pheasants Forever Danville Chapter......seed for food plots and prairies; tree seedlings; machine assistance through D.O.C. and S.C.S.

* Outdoor Heritage Foundation................................ Accepting self-supporting donations

* Illinois Audubon Sanctuaries Committee...................... " " "

* American Farmland Trust

EXHIBIT C

Landowners Guide to Natural Resources Management Incentives

Illinois Natural Resources Coordinating Council

November 1994

Jim Edgar, Governor
State of Illinois

Prepared by the Committee on Coordination of Cost Share Programs
and Tax Incentives ■ John S. Moore, Chairman

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20M

EXHIBIT D

Landowner Packet Contents

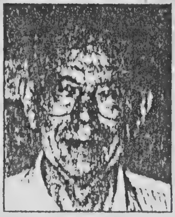
tion to the Chicago region flora has been growing by leaps and bounds."

These same volunteers are responsible for generating an unprecedented pre-publication order of 1,000 copies. The total press run will be 4,000 to 5,000.

To order your copy before they run out, send a check for $35 plus $3 shipping and handling, payable to IAS Publications, 1102 N. Butler Avenue, Indianapolis, IN 46219, or call 317-352-1970. Copies will also be available through The Morton Arboretum in Lisle, IL.

George Fell (1916-1994) A Founder of The Nature Conservancy

George Fell dedicated his life to the preservation of natural areas throughout Illinois and across the country. His impressive living legacy includes being one of the founders of The Nature Conservancy in 1950, helping create the Illinois Nature Preserves System and organizing the Natural Land Institute in 1958.



"When George died, the natural areas movement lost its foremost founder," says John Humke, the Conservancy's vice president of agency relations. "He certainly had a profound effect on how I think about natural area conservation. George had so much commitment that when you hung around him, some always rubbed off on you. You came away a better person."

Born in Elgin, Fell received a bachelor's degree in botany from the University of Illinois and a master's degree in wildlife biology from the University of Michigan. He then returned to Rockford where he became involved with the Ecologists Union. Elected vice president in 1946, Fell and his wife, Barbara, moved to Washington, DC, to set up an office there. In 1950, the group changed its name to The Nature Conservancy and elected Fell executive director, a position he held until 1958.

Fell then returned to Illinois and founded the Natural Land Institute in Rockford where he worked as executive director until his retirement early this year.

One of Fell's greatest contributions to the state was his successful push for the establishment of a nat
created the Illinois Na
has protected 33,000 a
served as secretary an

In 1991, the Comm
preserving the state's
and honors during his

EXHIBIT C
(includes the current issue of TNC publication The Conservator)

Conservation Can Be Good for the Economy in the Cache

Protecting land in the Cache River Bioreserve is definitely beneficial to the 100 threatened or endangered plant and animals species found there. But what impact will the bioreserve have on the people in the region? A team of researchers from Southern Illinois University tackled this question--and their results are good news for the economy and the ecology of the Cache.

The creation of this bioreserve will do two things: convert marginal farmland back to wetlands and forests, and increase tourism and recreational activities. The study found that after just five years, the economic picture in the Cache region could improve, thanks to the bioreserve.

Overall economic output would increase by over $1.3 million, personal income would increase by over $400,000 and 26 more people would be employed. After 15 years, these increases are estimated to be even greater.

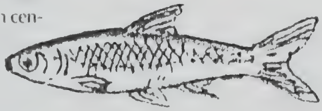
While there would be some initial economic loss due to conversion of farmland, the revenue and jobs generated by increased recreational activities, tourism and the visitor center would more than compensate.

This study demonstrates that conservation and economic growth don't have to be mutually exclusive. They can go hand-in-hand.

Working With Landowners Along The Little Vermilion River

The Little Vermilion River in central Illinois is an important refuge for threatened and endangered aquatic species, such as the bigeye shiner (*Notropis boops*) and the slippershell mussel (*Epioblasma triquetra*). Of particular importance is a 10-mile stretch in Vermilion County between Rt. 1 and the Indiana state line.

The Conservancy is eager to maintain and support the river's good health, and the key to that is working with the landowners along the drainage. To that end, the Conservancy's Central Illinois Field Office received a contract from the Illinois Department of Conservation to conduct landowner contact along the Little Vermilion River.

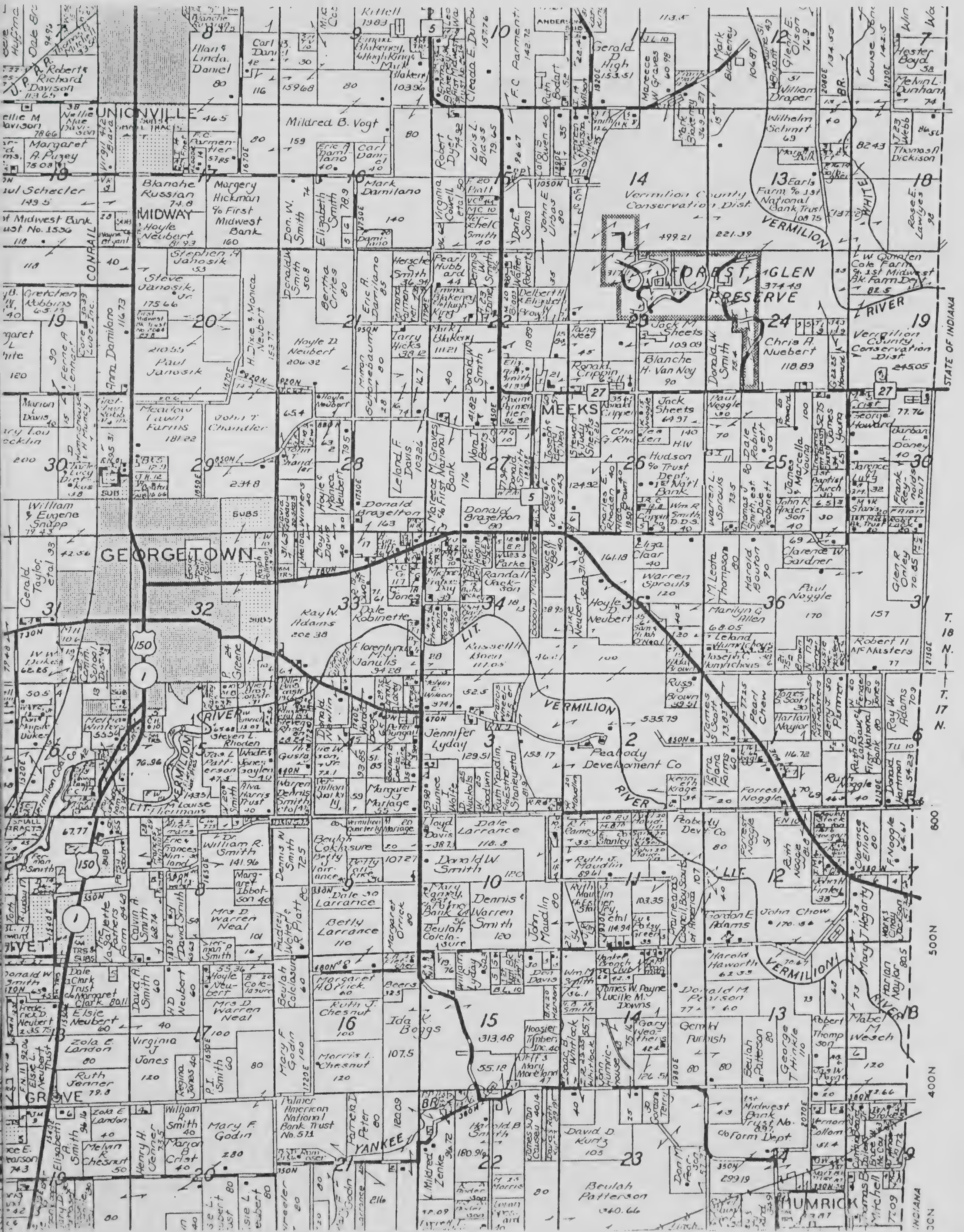


Under the contract, Suzanne Smith, a biologist and resident in the watershed, has been hired as an independent contractor to meet with landowners beginning this April. She will inform them about the ecological value of the river, learn about landowner concerns and land-use practices, and discuss voluntary methods for protecting their land and the river.

This fall, the Conservancy will analyze Smith's work to help develop a river system protection plan that will emphasize voluntary landowner participation. The plan will likely focus on ways to prevent or reduce streambank erosion, removal of trees along the river and changes to drainage within the basin.

Get Your Summer Issue of Prairie University

Prairie University is a guide to the wealth of educational opportunities in natural history and ecological restoration in northeastern Illinois. To order the summer issue, send $2 for postage and handling to: The Nature Conservancy, 79 West Monroe, Suite 900, Chicago, IL 60603, attn: **Prairie University**. Or stop in at the office, and pick up a copy for free.


UNIONVILLE
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Mark Blakeney
William Draper
Glenn E. Olson 76.9
Hester Boyd 38
Melvin L. Dunham 74
Wilhelm Schmit 69
Thomas A Dickison
Margaret A. Pugey 75.08
Paul Schecler 149.5
First Midwest Bank Trust No. 1536 118
Blanche Russian 74.8
Margery Hickman % First Midwest Bank 160
Hoyle Neubert 81.93
Mark Damilano 140
Robert Dyer 74.32
Lois L. Blass 79.65
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Rose E. Lawlyes 90
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Vermilion County Conservation Dist. 245.05
Chris A. Nuebert 118.89
Jack M Sheets 109.08
Blanche H. Van Noy 90
Donald W. Smith
Stephen A Janosik 53
Steve Janosik, Jr. 175.66
Paul Janosik 210.55
H. Dixie & Monica Neubert 153.77
Hoyle D. Neubert 206.32
Gretchen Robbins 65.13
Anna Damilano 116.73
Meadow Lawn Farms 181.22
John T Chandler 234.8
Marion Davis
William & Eugene Snapp
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Leland F. Davis 103.26
Marece M Graves % First National Bank
Donald Brazelton 163
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Randall Jackson
Hudson % Trust Dept. 1st Nat'l Bank
Jack Sheets 64.97
Dale Robinett 50
James Marcella Young
Frank Reynolds 70.17
Eliza Claar 40
Warren Sprouls 120
M Leota Thompson 80
Harold Bouton 80
Clarence W Gardner
Paul Noggle 170
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Leland Humrichous
Joseph C. Humrichous
Robert H McMasters 77
Kay W. Adams 202.38
Dale Robinette
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Russell H Boen 111.05
Jennifer Lyday 129.51
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Steven L. Rhoden
Alva Harris Trust
Margaret J Marage 55
Russ Brown 39.51
Pearl Chew 77.25
Harlan Naylor
Ruth B Lansaw % First National Bank 80
Ray W. Adams 70.9
Donald Hartman 54.23
Ruth Noggle
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Dr. William R. Smith 141.96
Beulah Colclasure
Betty Larrance
Donald W. Smith
Dennis Warren Smith 120
Dennis Warren Smith 180
John Maudlin 80
Ruth J. Maudlin 89.41
Gordon E Adams
John Chow 170.86
Clarence Elliott 80
Mrs D. Warren Neal 101
Mrs D. Warren Neal
Dale Larrance
Betty Larrance 110
Margaret Orrick 80
Audrey Walters & R Platt
Margaret Orrick 60
Ruth J. Chesnut 100
Ida R. Boggs 107.5
Morris L. Chesnut 120
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Hoosier Timbers Inc.
Harold Haworth 63.33
Donald M Pearson
Gerald Purnish 80
Beulah Patterson 80
George T Hinkle 110
Mabel M Wesch 120
Harlan Naylor 80.5
Mary J Hegarty
Dale Clark Trust
Margaret Clark 80.11
Elsie Neubert 60
Zola E. Landon 80
Ruth Jenner 79.8
Virginia J Jones 120
Mary F Godin 100
Mary F. Godin 280
Palmer American National Bank Trust No. 571
Pamela D Peter 80
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Harold B Smith 180.96
David D. Kurtz 105
Beulah Patterson 340.66
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William R. Smith 40
Marion B Crist 40
Melvin R Chesnut 50
Henry H. Jenner

WORTH PRESERVING-LITTLE VERMILION RIVER

The Little Vermilion River has been rated among the ten most outstanding river systems in Illinois. The Nature Conservancy, in cooperation with the Illinois Department of Conservation and the Illinois Nature Preserves Commission, launched the *Little Vermilion River Registry* in 1994. It is a voluntary landowner effort to maintain this high quality stream, and establish community participation to preserve the plants and animals dependent upon the Little Vermilion River for generations to come.

Through the commitment of landowners working together as stewards within the floodplain, the habitat surrounding this river can remain as a priceless example of one of Illinois' unique natural streams.

Please join us in this crucial effort to save part of Illinois' rich natural heritage.

A Program of:

The Nature Conservancy
416 Main Street, Suite 1600
Peoria, IL 61602
(309) 673-6689

Illinois Dept. of Conservation
Division of Natural Heritage
524 S. Second Street
Springfield, IL 62701-1787
(217) 785-8774

Illinois Nature Preserves Commission
P.O. Box 497
Sidney, IL 61877
(217) 688-2622

Little Vermilion River Registry Program

WHAT IS THE LITTLE VERMILION RIVER REGISTRY PROGRAM?

It is a voluntary program that asks landowners to preserve and protect their own land. Registry areas are chosen because they harbor species or natural communities of state, national and even global significance.

A property must have one or more of these natural values to qualify:

1. Habitat for rare or declining populations of plants or animals.

2. Outstanding natural communities characteristic of the native habitat of Illinois.

3. Other outstanding features such as unique geologic areas.

HOW DOES ENROLLMENT IN THE REGISTRY PROTECT A NATURAL AREA?

By learning about the native plants and animals that live on their property, landowners will be aware of potential threats to their natural area, discourage outside disturbances and reduce the chance that native flora and fauna will be accidentally destroyed.

WHAT COMMITMENT DOES THE LANDOWNER MAKE?

Owners of registered Little Vermilion River natural areas promise to:

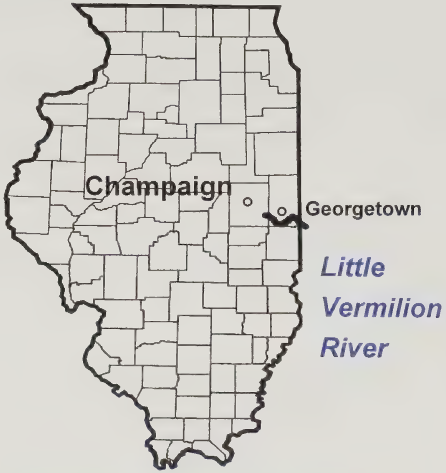
—Preserve and protect the area to the best of their abilities

—Notify The Nature Conservancy of any threats to the area such as pollution or drainage, etc.

—Inform The Nature Conservancy if the land is to be sold or if there are any land use changes that might threaten the area

WHAT SAY DOES THE LANDOWNER HAVE IN THE REGISTRATION PROCESS?

Registration is totally voluntary and will not occur without the owner's consent; it has no regulatory power and is not binding in any way. Participation in the program provides no rights of public access. As with any private land, visitors must receive permission from the landowner before entering the property.



IS THE COMMITMENT LEGALLY BINDING ON THE OWNER OF A REGISTERED NATURAL AREA?

No. The commitment may be cancelled at any time, although he or she is asked to give the Conservancy 30 days' notification. Nothing is signed. The strength of the protection commitment is the strength of the landowner's word.

ARE THERE ANY FINANCIAL ADVANTAGES?

Registration involves no payment or receipt of funds. The program representative can provide information on a variety of natural area dedication methods that can offer tax benefits to landowners interested in increasing protection on their property.

WHAT DOES REGISTRATION OFFER THE LANDOWNER?

In honor of his or her commitment to preserving the land, the landowner will receive a sign recognizing their participation in the Registry to post on their land and a certificate of recognition. Participants will be among an honor roll of landowners who have chosen to preserve the natural heritage of east-central Illinois.

IS LAND MANAGEMENT ASSISTANCE AVAILABLE TO PARTICIPATING LANDOWNERS?

Yes. The Nature Conservancy and Registry representatives will answer questions about the area and provide management advice and assistance.

A RESPECT FOR THE LAND: AN ILLINOIS TRADITION

The Little Vermilion River Registry is founded on a long standing Illinois tradition of citizen-based conservation. Much of the conservation and restoration of natural areas is done through the efforts of citizen volunteers and landowners.

This approach makes sense— government cannot and should not be solely responsible for the preservation of our natural lands. In Illinois, many of the best natural areas are owned by citizens capable of protecting these natural features.

WHAT IS THE NATURE CONSERVANCY AND WHY ARE WE INVOLVED?

The Nature Conservancy is an international private, non-profit conservation organization dedicated to preserving natural diversity. The Illinois Chapter was founded in 1957 and has protected nearly 58,000 acres of significant natural areas with the support of over 30,000 members. The Little Vermilion River Registry is one of our newest efforts in Illinois to create an opportunity for landowners living in a globally significant ecosystem to protect and preserve Illinois' natural heritage.

ALONG OHIO'S BIG DARBY CREEK, "OPERATION FUTURE" IS SOWING THE SEEDS OF COOPERATION BETWEEN FARMERS & CONSERVATIONISTS

BY MARY MIHALY

The combine just came through the field near Woodstock, Ohio, where farmer Mark Westfall walks on this crisp afternoon in early October. Rubble from newly harvested soybeans crunches under his boots as he recounts how he felt when conservationists came into his life.

"Originally my feelings were pretty negative," says the lanky 43-year-old. "I was afraid somebody was going to tell me what I could and couldn't do on my own land."

Westfall's 4,500-acre farm sits near the northern end of the Big Darby Creek watershed in central Ohio. Westfall grew up playing along the creek's banks, among the wild coneflowers and the majestic oak and hickory trees that shade the Big Darby. But he wasn't aware of the fragile, wondrous diversity of wildlife that lived, literally, in his own backyard—the rare fish and mussel species, the dozens of types of birds that thrived there.

Then the conservationists came. In 1991, the U.S. Department of Agriculture (USDA) announced plans to work with The Nature Conservancy, the Ohio Department of Natural Resources and the Ohio State University extension service to study ways to help preserve the Big Darby's exceptional water quality. The extension service called a meeting that winter to announce the project and explain how farmers could participate.

Despite Westfall's concerns, people such as former extension agent Dennis Hall and staff from The Nature Conservancy's Ohio field office didn't want to order farmers around. They aimed to find ways to both protect a significant ecosystem and help farmers increase their yields and profits—a field of endeavor known to some as "sustainable agriculture."

© LEN TECK

▲*Canoe trips on the Big Darby offer a chance for sharing views and broadening perspectives. Here Arnold Renner, a farmer, and Dan Rice, a state zoologist, team up.*

"After that meeting, Mark kind of sought us out," Hall recounts. "He said, 'Count me in.' "

Recognizing the potential benefits of sustainable agriculture, and the pitfalls of inaction, Westfall and other farmers have joined with the conservationists and government officials in "Operation Future," an innovative effort to keep the Big Darby and its surrounding community healthy—economically as well as environmentally. Westfall's early interest got him elected vice president by his fellow farmers, and his leadership role in Operation Future was set.

The group now counts more than 100 members and it has become a model for farmer involvement in conservation efforts. Robin Green, director of the Conservancy's Ohio chapter and a farmer herself, recalls a time when area farmers told her they thought the Conservancy was trying to put them out of business. "Today," Green says, "the same farmers seek me out to ask how they can work with the Conservancy to save the Big Darby. They have stated we're not moving fast enough. That shows how far we've come."

THE 78-MILE-LONG BIG DARBY CREEK runs north-south about 20 miles west of Columbus, Ohio's capital. Farms sandwich the river for most of its length; of the watershed's 358,000 acres, more than 346,000 are open space—mostly corn and soybean fields. At almost any given point, the horizon is marked by a ridge of trees: windbreaks planted by the farmers to protect their homes. Trees line many sections of the Big Darby, too, helping to preserve the habitats hidden there.

The Big Darby is a relatively clean stream; if it weren't, it could never support such a wide assortment of animal life. Snails, crawfish, creek chub suckers, southern redbelly dace, the Tippecanoe darter, needlenose gar, flathead catfish, rock bass and 40 types of mussels—including a

dozen rare or endangered species—all share the same sparkling habitat. The mussels in particular are a good indicator of healthy water: They filter-feed from whatever the current brings them, and too much sediment or water-borne pollutants kills them.

But development and agriculture pose challenges to the creek. The growth of nearby Columbus has resulted in more pollution and increased water demand. A study by the Mid-Ohio Regional Planning Commission projects that, along the western edge of metropolitan Columbus (which abuts the eastern edge of the watershed), population will increase 237 percent between the years 1990 and 2010. An even more immediate threat is soil erosion and resulting sedimentation: Soil particles washing down into the creek with rain, snow and wind suffocate mussels and choke off the food supply for fish and smaller creatures.

State and national attention focused on the Big Darby in 1991, when the Ohio Environmental Protection Agency recognized the creek as an "exceptional warmwater habitat" and The Nature Conservancy designated the Big Darby Creek one of the country's "Last Great Places" in need of urgent protection. That same year, the USDA launched its project to help farmers in the watershed reduce sedimentation and protect the riverside corridor.

County extension offices in the watershed strategized and came up with goals for economic and environmental health. Farmers including Mark Westfall, Autie Howard, Valentine Yutzy and Bill Conklin were recruited to form a task force. They decided to seize the initiative, fearing that the consequence of not taking the lead would be regulation.

From that nucleus evolved the Operation Future Association. Many people's first exposure to the group came from joining one of its canoe trips down the Big Darby River. These trips were often the first for farmers who had lived along the creek for decades. "It had an effect," remembers Westfall, whose first canoe ride was with a former Conservancy staff member. ("Operation Future puts adversaries together in those canoes whenever possible," Westfall quips.)

Captive audiences in the canoes, conservationists and farmers had the chance to hear each others' perspectives, often for the first time. These new perspectives were broadened at four stream-side seminars, each focusing on different aspects of the Big Darby's ecology.

These trips helped spur a dialogue among many parties that is today one of the keys to Operation Future's success. "This whole endeavor is shaped by different perspectives," reflects Dennis Hall, who in late 1993 was tapped to be executive director of Operation Future. "It's a mosaic of ideas and actions that have come together to make this really artistic piece."

WITH A VARIETY OF PROGRAMS, Operation Future works toward its overriding goal of linking environmental and economic soundness in the Big Darby watershed. In one such program—integrated pest management—participating farmers experiment with different types and amounts of pesticides and fertilizers to try to find a balance between profits and environmentally sound farming. "So far, we're seeing good results," reports Westfall. "We see we're not overapplying, not just dumping chemicals on our land."

The group also sponsors teacher training, visits local school groups, and has completed its second round of a "Maximum Economic Yield Contest," in which farmers

▼ *Operation Future promotes farming techniques that benefit both biodiversity and the bottom line. At Webster farm, where Luttrelle Boerger drives a combine, the group conducts demonstrations of one such technique: "no-till" farming.*

© HAROLD E. MALDE

▲ *Farmers, conservationists and government officials in Ohio are coming together—both on the river and off—in an attempt to keep the Big Darby and its surrounding community healthy.*

compete to see who can be the most efficient producer; as a cost of production, farmers in the contest are assessed a fee for soil loss.

Sediment, from topsoil running into the river during heavy rainstorms, is the biggest threat to the Big Darby as a clean, healthy habitat. In some spots, livestock have worn down the creek's banks over the years with normal grazing and trampling. In other places, farmers plant crops right up to the river's edge, which makes way for erosion and sedimentation. New farming techniques that can combat sedimentation are presented to farmers through Operation Future.

One of the most popular new techniques is no-till farming. No-till means just what the name implies: After the harvest, the farmer does *not* churn up the soil and till plant residue under the surface. With no-till, the rubble from last year's crop stays on the surface until the next spring planting. Cornstalks left aboveground keep water from running off the soil and, consequently, keep the soil from running off the land. No-till also saves in labor and fuel costs, since farmers and their help are in the fields less often.

Bill Conklin, who recently finished a stint as president of Operation Future, farms full-time with his brother on 1,200 acres in Marysville, east of the watershed, and tends about 300 head of cattle. Conklin convinced his brother to try no-till in four fields of corn, and they had the same yield as the previous year, while saving in fuel and labor costs. "But there's a drawback," Bill adds. "It has to be dry to no-till. With corn, if you have too much mulch—which is what the old cornstalks are—you get slugs."

Because there is much more rubble, slugs and other pests are more of a problem in corn production than with soybeans, "and they are a major concern," Westfall says. "We've already learned that what you save in labor [by using no-till], you'd better replace with better management, because you'll have more things to watch." The trade-off, he says, is an increase in chemicals, "but here

again, we see a big benefit from Operation Future already. Some farmers, starting last year, tried splitting their herbicide use, applying one-fourth the amount but doing it twice, so they've only used half the normal amount of herbicides—and it's working."

Not every farmer in the watershed—or in Operation Future—thinks no-till is the best way to farm. Valentine Yutzy, who owns a farm right on the Big Darby in Plain City, is not a fan of no-till. Yutzy has diversified his farm more than anyone in the area; he raises five types of crops and a variety of cattle on his 200 acres. He has tried no-till and has seen little difference in either his yield or soil retention. He says the ground needs tilling because, "you want residue [buried] in the ground, [where it will] produce humus. If you don't have humus in soil, it gets hard, then it washes away."

In promoting all of its programs, communication and education are two of Operation Future's greatest challenges. "I saw early on," Westfall says, "that they didn't know in Pickaway County what was going on in Logan, and they had no idea in Logan what problems Madison farmers faced."

"We need to get the farmers in the watershed knowledgeable about the technology of what we need to do to keep our soil on our farms," says Autie Howard, a board member of Operation Future who, like Westfall, farms soybeans, corn and wheat. "Education is the biggest thing."

THERE IS MORE THREATENING the Big Darby's health than farming methods that fail to protect the creek. Urbanization—and its attendant sewage and storm water runoff—is a major worry for the creek's stewards.

Some protection is provided by the state and federal governments, which have both designated portions of the Big Darby as a scenic river. This status restricts federally funded dams and other projects that would alter the river's free-flowing condition. Additional protection for the Big Darby is being sought through local zoning ordinances.

Other organizations, such as the Darby Partners (a consortium of more than 30 public agencies and private groups), are also working to protect the river: Ohio State University extension service has provided expertise and office facilities for Operation Future, and the Kellogg Foundation has donated $267,000 through The Nature Conservancy to the farmers' group for staff salaries and overhead for three years. And The Nature Conservancy continues to provide support to Operation Future, while undertaking its own habitat protection efforts.

But in the end, the Big Darby's fate will rest in the hands not of groups or governments, but of those who live along and near the creek. And Operation Future's director seems keenly aware of this. "What we do is promote environmental appreciation," says Dennis Hall. "By helping farmers appreciate this natural resource, we encourage them to ask the right questions; I think that's how we motivate them to overcome barriers to change."

"I have way too much respect for farmers in this watershed to think I can tell them how to farm their land," Hall adds. "What I *can* do, though, is create an atmosphere in which they might adapt these practices to their operations and protect the creek that way."

Back in Woodstock, Mark Westfall's just-harvested soybean field crunches underfoot. Westfall's farming techniques aren't all that has changed since he got involved in Operation Future. "I'm more inclined to want to make a difference politically," he says. "I've started to see, yeah, I *can* make a small difference." He talks of preserving the Big Darby, but he also points out the tens of thousands of dollars he must spend to purchase one combine. Modern-day financial pressures must be addressed with the same careful thought, he says, as saving the environment.

"Whatever we do, it has to be economically viable," Westfall says, "because if it's not, we won't be here to do it." ◼

MARY MIHALY *is a freelance journalist based in Cleveland.*

▼*Farmer Mark Westfall was initially skeptical about conservation efforts on the Big Darby. Now he is one of the leaders of Operation Future. "Whatever we do, it has to be economically viable," he says of programs to protect the river, "because if it's not, we won't be here to do it."*

U.S. Fish and Wildlife Service
Chicago Metro Wetlands Office
1000 Hart Road, Suite 180
Barrington, Illinois 60010
708-381-2253

Illinois Department of Conservation
Division of Natural Heritage
524 S. Second Street
Springfield, Illinois 62701-1787
217-785-8774

Endangered Species Protection Board
524 S. Second Street
Springfield, Illinois 62701-1787
217-785-8687

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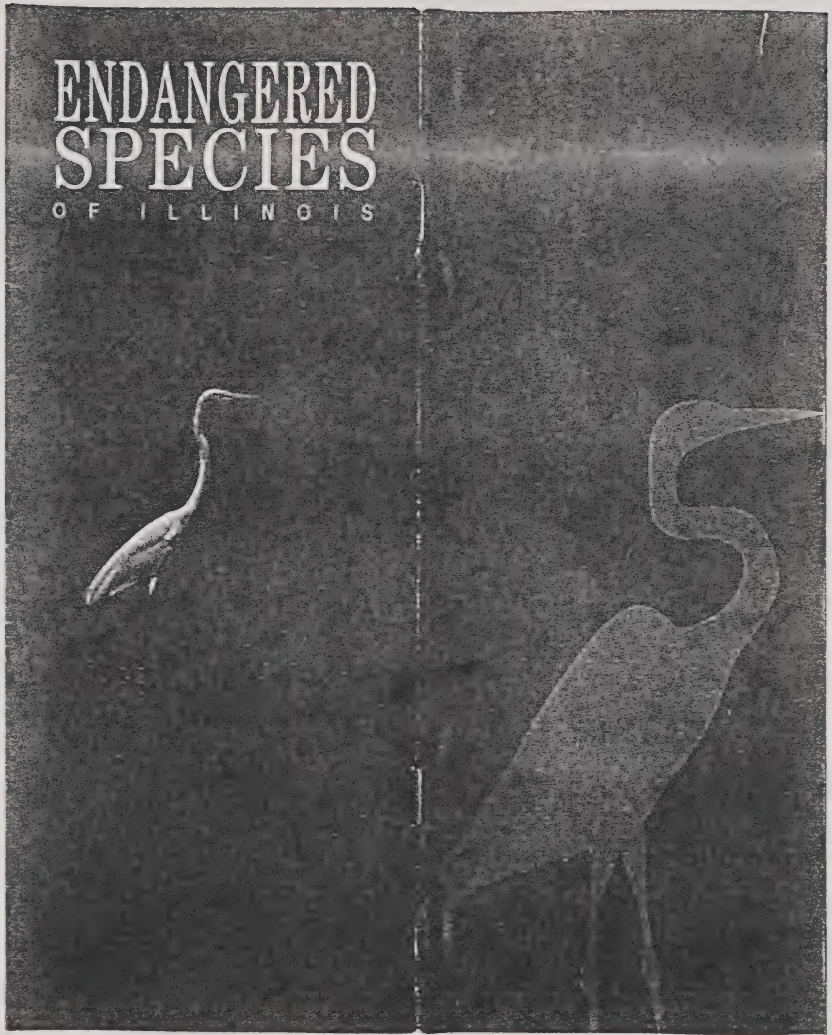
Funding provided by the Department of Interior, U.S. Fish and Wildlife Service.
Prepared by the Illinois Department of Conservation, Division of Natural Heritage.



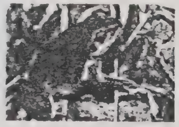
ENDANGERED SPECIES
OF ILLINOIS

Bison, bears, and beavers — the story of Illinois endangered species

Did you know that there are animals that used to exist in Illinois but have already become extinct? Buffalo once grazed our prairies. Black bear hunted our forests until about 1870. Elk disappeared in the 1830 s and timber wolves in the 1880 s. Even the beaver was once completely eliminated within Illinois! It was reintroduced in 1935 and now exists throughout the state. On the other hand, several other species that once existed in the state have not only been eliminated from Illinois but have disappeared from the earth. The passenger pigeon, Carolina parakeet, Sampson's pearly mussel and a fish called the longjaw cisco are all extinct throughout their range.

When you hear about endangered species you may think of exotic animals in tropical rain forests. Fact is, right now, right here, in Illinois, there are hundreds of species of plants and animals in danger of extinction.

Here's the rest of the story.



ILLINOIS CHORUS FROG

ENDANGERED SPECIES OF THE LITTLE VERMILION RIVER

FISHES

BIGEYE CHUB

Bigeye Chub (*Notropis amblops*)

The bigeye chub is rapidly disappearing from many parts of its range, which in historic times extended from Oklahoma and eastern Kansas, northeast and southern Michigan, and western New York and south to Alabama. This species was considered extirpated from Illinois until recently being rediscovered in the Little Vermilion in 1992. It is declining in much of its northern range, especially in agricultural areas. The bigeye chub lives in rocky pools with current, usually near riffles and vegetation. An exceptional intolerance of silt appears to be the most important factor in causing the decline of the bigeye chub.

Bigeye Shiner (*Notropis boops*)

The bigeye shiner is uncommon in Illinois but known from tributaries of the Mississippi and Wabash rivers. It was formerly considered common in the Vermilion and Little Vermilion rivers but has always been relatively rare and sporadic in the rest of the state. The bigeye shiner occurs in clear, high-gradient streams over clean gravel or mixed sand and gravel near emergent vegetation along the stream margin. Siltation, increased turbidity and impoundments have caused a significant decrease in abundance of this species within Illinois.

River Chub (*Nocomis micropogon*)

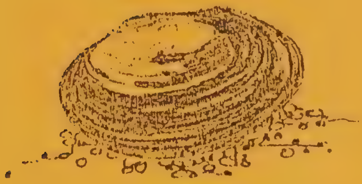
The river chub has been known to occur in the fast waters of the Wabash River in isolated locations in Clark and Lawrence counties, Illinois, but it is widely distributed and common in large creeks of nearby Indiana (Smith 1979). It prefers rocky runs and flowing pools of small to medium streams to make pit and mound nests for spawning. Siltation may have caused its decline since it is a site feeder requiring clear waters to locate its food.

Adapted from:

Endangered and Threatened Species of Illinois:
Status and Distribution Volume 2- Animals

ENDANGERED SPECIES OF THE LITTLE VERMILION RIVER

MUSSELS



LITTLE SPECTACLE-CASE

Little Spectacle-case (*Vilosa lienosa*)

The little spectaclecase is known from the Ohio and Wabash drainages. In Illinois, it is presently restricted to the Wabash River drainage where it occurs in the Embarass, Little Vermilion, and Vermilion rivers. This species inhabits streams and small rivers, and is usually found in shallow water on a sand/mud bottom. Increased siltation, domestic, industrial, and agricultural pollution, and competition from exotic mussel species are all potential threats to this species in Illinois

Slippershell (*Alasmidonta viridis*)

In Illinois, the slippershell mussel is known from the Sangamon, Kankakee, Vermilion and Little Vermilion river systems. It inhabits small to medium sized streams where it is usually found buried in sandy substrates in shallow water. The slippershell now has a restricted distribution in Illinois, and its numbers have been reduced most likely as a result of increased siltation and channelization of small and medium sized streams throughout the state.

Adapted from:

Endangered and Threatened Species of Illinois: Status and Distribution Volume 2- Animals

ENDANGERED SPECIES OF THE LITTLE VERMILION RIVER

BATS

Indiana Bat (*Myotis sodalis*)

The Indiana bat is found throughout states east of the Mississippi River as it migrates between summer and winter habitats. During the summer it can be found roosting under loose tree bark in upland and floodplain forests near waterways. Studies have shown they prefer these perennial stream areas for foraging. During the winter they hibernate in caves or abandoned mines in dense clusters.

The Indiana bat is both an Illinois and federally endangered species with populations that continue to decline due to habitat disturbance or loss and pesticide poisoning. By protecting the floodplains and trees within them, reducing the disturbance of hibernation sites and carefully considering our use of pesticides we can hopefully help this species rebound. They are excellent predators of night-flying insects sometimes consuming up to 900 insects in an hour!

Please note: The idea that bats attack people and all carry rabies is false. They may fly closely over our heads to catch the insects we attract but do not bite unless provoked (being picked up). Less than 10 cases of rabies due to bats have been reported in North America in the past 40 years. More people have died from attacks by their own pets.

Adapted from:
Endangered and Threatened Species of Illinois:
Status and Distribution Volume 2- Animals

Robert J. Reber

These silver maples lining the Middle Fork of the Vermilion River protect the banks against erosion.

Riparian Zones

by Brian Anderson

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Illinois' prairies have virtually disappeared, but the stream and river corridors have proven more durable, although they have not escaped unscathed. The annual cycle of floods were controlled, but as a result rich sediments were no longer deposited in the floodplains along Illinois' streams. The broad, forested bottomlands were plowed, ditched, and

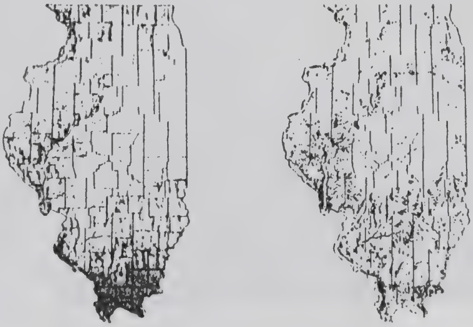

Photo courtesy of Illinois Natural History Survey

Illinois forestlands in 1820 (left) and 1980 (right).

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"Riparian" was taken from the Latin "riparius" or "that which frequents riverbanks," which in turn was taken from the Latin noun "ripa," meaning "bank of the river." The riparian zone is that land next to rivers and streams influenced by the river and its natural hydrologic cycle. Today, because Illinois' rivers and streams have been drastically altered, riparian zone has come to mean the zone next to a stream or river that has been left in a natural vegetation. Although the great fires no longer race across Illinois' landscape, the riparian zones still play a critical role in maintaining water quality, lessening flooding, and supporting wildlife populations. More than 80 percent of Illinois is plowed, grazed, paved, or landscaped. As a result, surface water runs off the land at a rate much faster than in presettlement times. Surface water runs off agricultural land and paved surfaces many times faster than it does grasslands. Forestland slows surface runoff even more than does grasslands. In fact, as a forest matures, and the canopy closes, it becomes more efficient at slowing surface runoff. The leaves of trees act as shock absorbers, intercepting even pounding rains, and then slowly releasing the raindrops, which by then have given up a great deal of kinetic energy. The more closed the forest canopy, the higher the density of leaves, and the more effective the forest in slowing the velocity of surface runoff. Of course, as surface water runoff slows, it is able to carry less soil. The soil settles in the stream, causing sedimentation. Most aquatic biologists agree that sedimentation has been the main culprit in the decline of Illinois' streams. It is possible to significantly reduce soil erosion and also reduce the peak and duration of flooding by using grass waterways and leaving adequate riparian zones. An additional benefit is a reduction in herbicide and pesticide runoff into streams and rivers. A research group with the Illinois Natural History Survey and University of Illinois studying riparian zones as "filter strips" estimated that subsurface leaching of nitrates into streams could be reduced by as much as 80 percent upon passing through grass buffer strips, and by as much as 90 percent upon passing through forested buffer strips.

Streambank erosion is also greatly reduced if natural vegetation is left in the riparian zone, where its deep roots can resist increased stream flows. Where streambanks are unprotected, topsoil washes into streams. If a farmer plows too close to the streambank, the cropland can fall into the stream. The photo of Court Creek illustrates the consequences of encroaching too far into the riparian zone.

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Riparian habitats add seasonal diversity to the landscape.

In heavily agricultural or urban parts of the state, riparian zones are virtually the only habitat available for wildlife species. These zones provide cover, water, and travelways for game and nongame species. Even plants require corridors that allow their pollinators to find them. In many cases, linear riparian corridors provide the only connection between larger tracts of natural lands. In such cases, they serve as vital "genetic pipelines" allowing reproduction between otherwise isolated populations, thereby maintaining genetic vigor and avoiding the inbreeding problems so common to small populations.

Wooded riparian zones are very important to fish populations because they provide shade, which results in cooler water temperatures. More oxygen can be dissolved in cool water than in warm water. Without shade during the summer—when water levels are lowest—fish populations can be deprived of the oxygen and die.

Riparian zones not only help preserve natural resource values, they make good economic sense. They help maintain water quality and wildlife and fish populations, and help keep soil in place. Furthermore, if enough landowners maintain riparian zones, flooding can be reduced. Watershed-wide planning and participation is needed to yield the best results.

So how does a landowner restore and maintain functional riparian zones? The first question usually asked is, how wide should the riparian zone be? Scientists have not identified the ideal width for a riparian zone, but at least 30 to 50 feet along each side of the stream should be allowed to revegetate. Riparian zones 100 feet wide are often recommended. The Shawnee National Forest Plan, for example, calls for maintenance of riparian buffers of 100 feet. A more specific and detailed approach is to consult the county soil survey regarding the property. The soil surveys provide detailed aerial photos with overlain soil designations. If you identify the soil types adjacent to the segment of stream you are interested in, you can then consult a table that assigns a capability class and subclass to each soil. The capability classes range from I to VIII and indicate suitability for cultivation. Capability subclasses are designated by the letters *E*, *W*, *S*, or *C*. Any soil with a subclass designation of *W* tends to be wet and should be left in or restored to natural cover. If the soils adjacent to the "wet" soils are assigned a capability subclass of *E*, they are considered erosive soils and also require a close-growing plant cover to be maintained. If it is impractical to commit all erosive soils to riparian zone rehabilitation, then another strip 30 to 50 feet wide should be restored as riparian buffer. Of course, in very broad bottomlands, which are often tiled or leveed and where both wet and erosive soils are being cultivated, 100-foot buffer strips are recommended.

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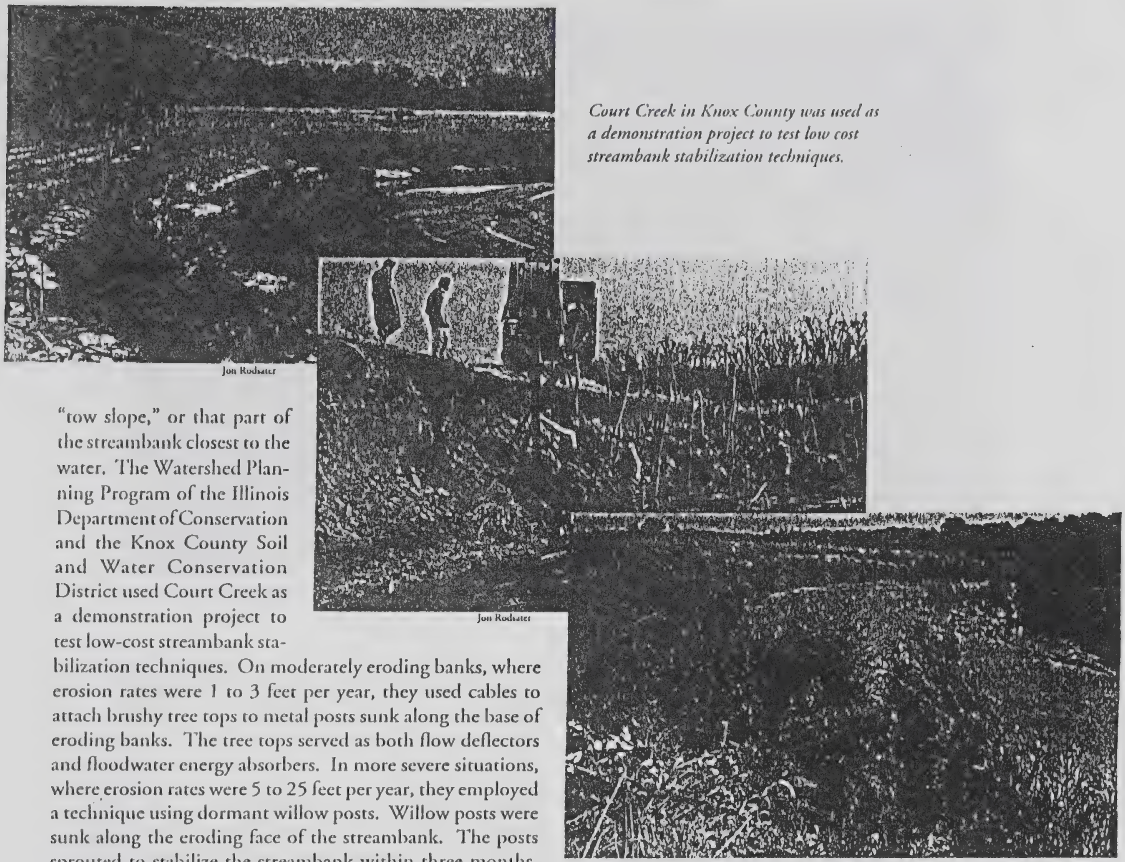

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Jon Rodsater

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If you are interested in rehabilitating riparian zones on your property, you may be eligible for cost sharing under the Stewardship Incentive Program (SIP) of the 1990 Farm Bill. The Riparian and Wetland Protection and Enhancement component of SIP provides 75 percent cost sharing up to $600 per 100 feet of streambank on qualifying projects. If you are interested in this program, contact your Illinois Department of Conservation District Forester for details.

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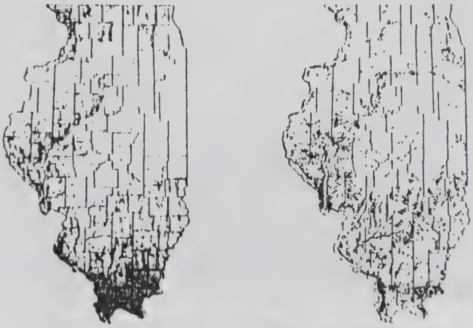

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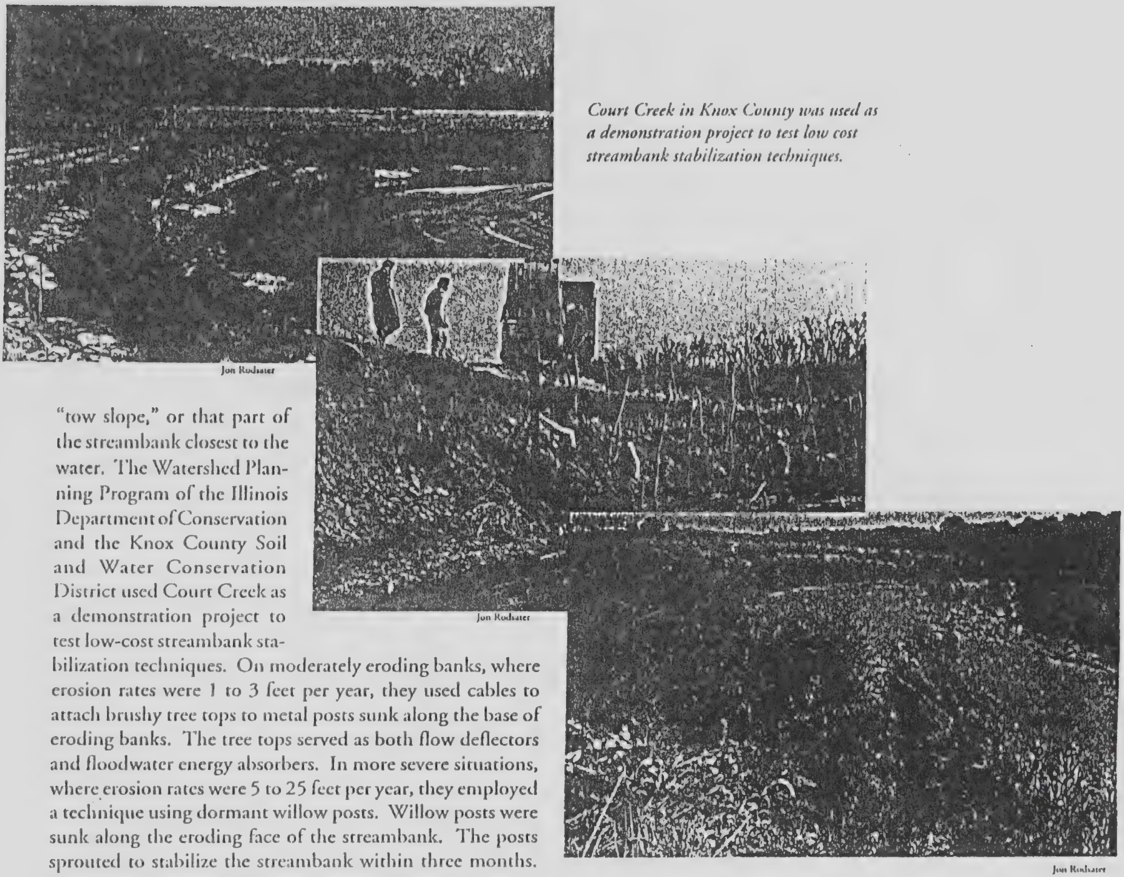

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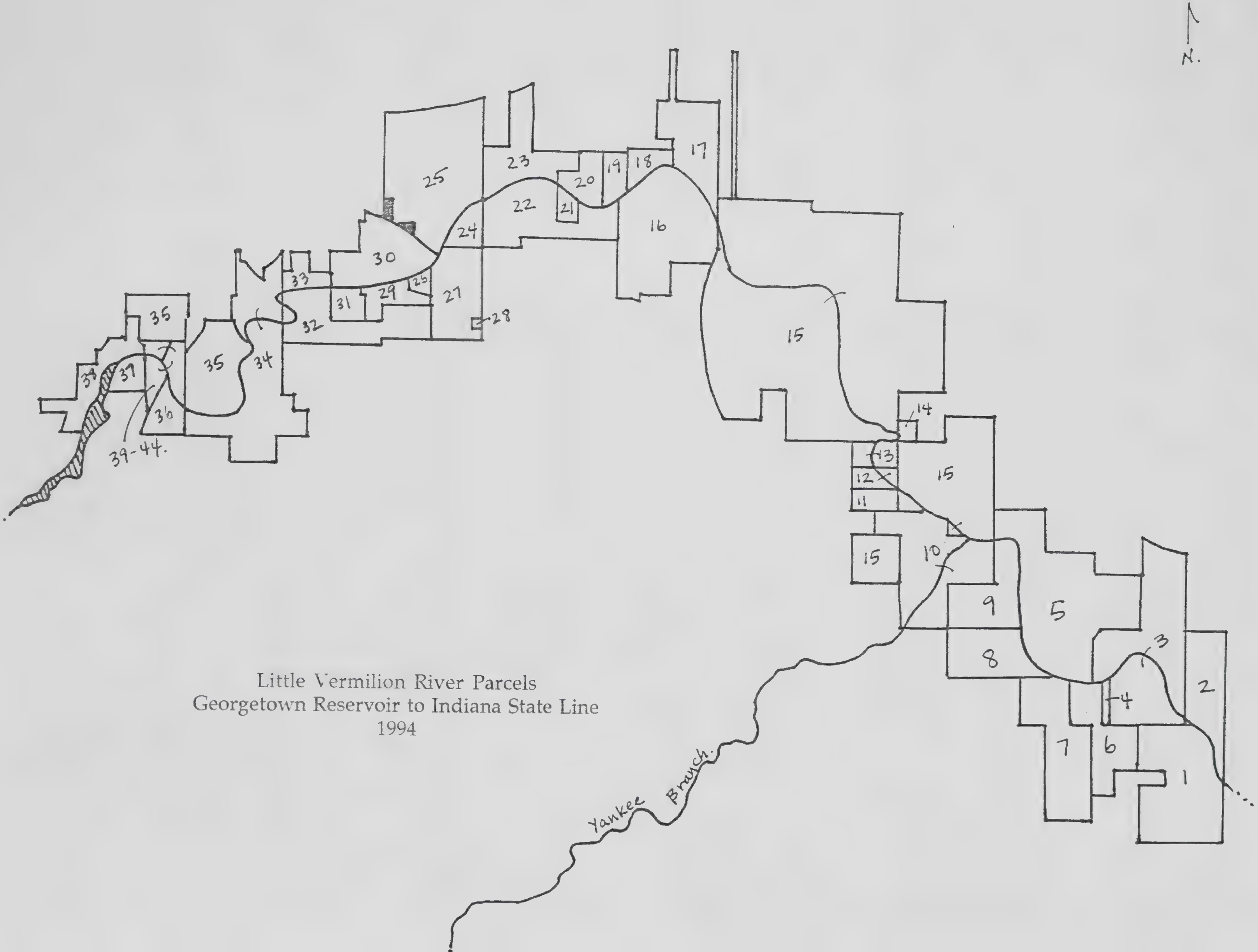
EXHIBIT E

Landowner Parcels, Names, and Addresses



Little Vermilion River Parcels
Georgetown Reservoir to Indiana State Line
1994

Little Vermilion River Project Landowner Parcel Key 1995

parcel #	last name	first name	address
1	Wesch	Danny	R.R.1 Cayuga, Indiana 47928
2	Naylor	Harlan	R.R. 1 Cayuga, Indiana 47928
3	Hegarty	Mary J.	P.O. Box 158 Newport, Indiana 47966
4	Hinkle	Justin and Amanda	R.R. 1 Box 93 Ridgefarm, Illinois 61870
5	Chow	John	R.R.1 Box 494 Georgetown, Ilinois 61846
6	Thompson	Robert F.	214 N. Division Cayuga, Indiana 47928
7	Hinkle	George	R.R. 1 Box 93 Ridgefarm, Illinois 61870
8	Haworth	Harold	R.R. 1 Georgetown, Illinois 61846
9	Adams	Gordon	R.R. 1 Georgetown, Illinois 61846

Little Vermilion River Project Landowner Parcel Key 1995

parcel #	last name	first name	address
10		Prairielands Council #117	P.O. Box 6267 Champaign, Illinois 61820
11	Maudlin	John	19327 E. 550 North Rd. Georgetown, Illinois 61846
12	Donahue	Sara	811 W. University Urbana, Illinois 61801
13	Maudlin	Paul	525 Criglos Road Wales, Wisconsin 53183
14	Spicer	Cary	R.R. 1 Box 515 Georgetown, Illinois 61846
15	Peabody Coal		
16	Boen	Doris	R.R. 1 Box 463 Georgetown, Illinois 61846
17	Jackson	Randall	R.R. 1 Georgetown, Illinois 61846
18	Ferguson	Daniel	325 S. Third Street Georgetown, Il. 61846

Little Vermilion River Project Landowner Parcel Key 1995

parcel #	last name	first name	address
19	Russian	Ronald	R.R.1 Box 588 Georgetown, Illinois 61846
20	Thornton	June	7396 N. 1800 East Road Georgetown, Illinois 61846
21	Troxel	Dennis	R.R. 1 Box 591-A Georgetown, Illinois 61846
22	Janulis	Florentyna M.	7142 N. 1800 E. (R.R. 1 Box 593) Georgetown, Illinois 61846
23	Robinette	Dale	7530 N. 1800E. Georgetown, Illinois 61846
24	Gilliland	John L.	R.R. 1 Box 596 Georgetown, Illinois 61846
25	Adams	Ray and Hilda	1020 Texas Avenue Danville, Illinois 61832
26	Rhodes	Stephen and Esther	Yankee Point Road Georgetown, Illinois 61846
27	Newlin	Donald and Dorothy	R.R. 1 Box139 Dana, Indiana 47847

Little Vermilion River Project Landowner Parcel Key 1995

parcel #	last name	first name	address
28	Newlin	Ann	R.R. 1 Box 150 Georgetown, Illinois 61846
29	Rhoden	Charles	R.R. 1 Box 539 Georgetown, Illinois 61846
30		Big "O", Incorporated	P.O.Box 793 Tilton, Illinois 61834
31	Emrich	William G.	R.R. 1 Box 449-A Georgetown, Illinois 61846
32	Rhoden	Steven L.	R.R. Box 449 Georgetown, Illinois 61846
33	Ramey Estate	Mary	2 W. Main Street Danville, Illinois 61832
34	Fliermans	Louise	1013 N. Vermilion Apt. 3 Danville, IL 61832
35	Winters	Ernest	R.R. 1 Box 6936 Georgetown, Illinois 61846
36	Cunningham	Kay	R.R. 1 Georgetown, Illinois. 61846

Little Vermilion River Project Landowner Parcel Key 1995

parcel #	last name	first name	address
37	c/o Mayor Lewis Galyen	City of Georgetown	208 S. Walnut Georgetown, Illinois 61846
38		Vermilion Coal Company	191 Waukegan Road Northfield, IL 60093
39	Marilyn Campbell	Betty Youngblood and	c/o Illinois Audubon Society * P.O. Box 608 34 W. 269 White Thorn Road Wayne, Illinois 60184
40	Henderson	Steven and Patricia	R.R. 1 Box 274 (6672 on mailbox) Georgetown, Illinois 61846
41	Jordan	Karl	518 Glendale Danville, Illinois 61832
42	Ott	Marion L. and Marie	R.R. 1 Box 277 Georgetown, Illinois 61846
43	Rankins	Darrell and Nancy	R.R. 1 Georgetown, Illinois 61846
44	Witherspoon	Melvin and Lisa	R.R. 1 Box 275 Georgetown, Illinois 61846

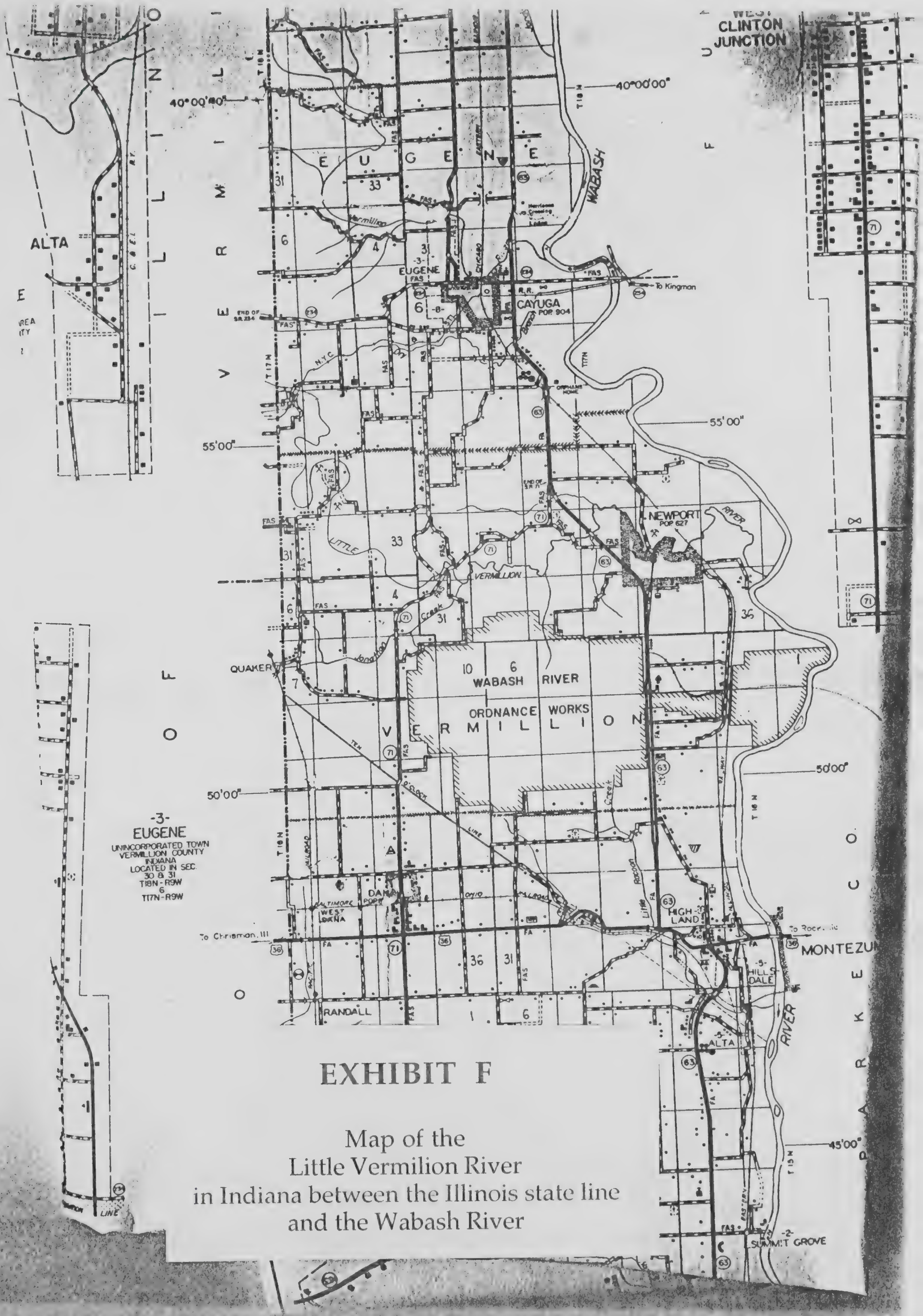


EXHIBIT F

Map of the
Little Vermilion River
in Indiana between the Illinois state line
and the Wabash River

EXHIBIT G

Little Vermilion River Registry

Brochure, Sign, and Certificate

WORTH PRESERVING- LITTLE VERMILION RIVER

The Little Vermilion River has been rated among the ten most outstanding river systems in Illinois. The Nature Conservancy, in cooperation with the Illinois Department of Conservation and the Illinois Nature Preserves Commission, launched the *Little Vermilion River Registry* in 1994. It is a voluntary landowner effort to maintain this high quality stream, and establish community participation to preserve the plants and animals dependent upon the Little Vermilion River for generations to come.

Through the commitment of landowners working together as stewards within the floodplain, the habitat surrounding this river can remain as a priceless example of one of Illinois' unique natural streams.

Please join us in this crucial effort to save part of Illinois' rich natural heritage.

A Program of:

The Nature Conservancy®

The Nature Conservancy
416 Main Street, Suite 1600
Peoria, IL 61602
(309) 673-6689

Illinois Department of Conservation
life and land together

Illinois Dept. of Conservation
Division of Natural Heritage
524 S. Second Street
Springfield, IL 62701-1787
(217) 785-8774

Illinois Nature Preserves Commission
P.O. Box 497
Sidney, IL 61877
(217) 688-2622

Little Vermilion River Registry Program

WHAT IS THE LITTLE VERMILION RIVER REGISTRY PROGRAM?

It is a voluntary program that asks landowners to preserve and protect their own land. Registry areas are chosen because they harbor species or natural communities of state, national and even global significance.

A property must have one or more of these natural values to qualify:

1. Habitat for rare or declining populations of plants or animals.

2. Outstanding natural communities characteristic of the native habitat of Illinois.

3. Other outstanding features such as unique geologic areas.

HOW DOES ENROLLMENT IN THE REGISTRY PROTECT A NATURAL AREA?

By learning about the native plants and animals that live on their property, landowners will be aware of potential threats to their natural area, discourage outside disturbances and reduce the chance that native flora and fauna will be accidentally destroyed.

WHAT COMMITMENT DOES THE LANDOWNER MAKE?

Owners of registered Little Vermilion River natural areas promise to:

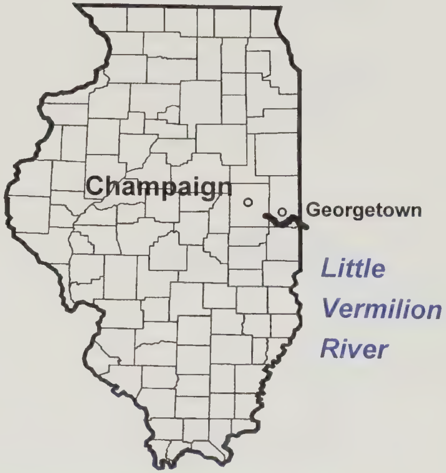
—Preserve and protect the area to the best of their abilities

—Notify The Nature Conservancy of any threats to the area such as pollution or drainage, etc.

—Inform The Nature Conservancy if the land is to be sold or if there are any land use changes that might threaten the area

WHAT SAY DOES THE LANDOWNER HAVE IN THE REGISTRATION PROCESS?

Registration is totally voluntary and will not occur without the owner's consent; it has no regulatory power and is not binding in any way. Participation in the program provides no rights of public access. As with any private land, visitors must receive permission from the landowner before entering the property.



IS THE COMMITMENT LEGALLY BINDING ON THE OWNER OF A REGISTERED NATURAL AREA?

No. The commitment may be cancelled at any time, although he or she is asked to give the Conservancy 30 days' notification. Nothing is signed. The strength of the protection commitment is the strength of the landowner's word.

ARE THERE ANY FINANCIAL ADVANTAGES?

Registration involves no payment or receipt of funds. The program representative can provide information on a variety of natural area dedication methods that can offer tax benefits to landowners interested in increasing protection on their property.

WHAT DOES REGISTRATION OFFER THE LANDOWNER?

In honor of his or her commitment to preserving the land, the landowner will receive a sign recognizing their participation in the Registry to post on their land and a certificate of recognition. Participants will be among an honor roll of landowners who have chosen to preserve the natural heritage of east-central Illinois.

IS LAND MANAGEMENT ASSISTANCE AVAILABLE TO PARTICIPATING LANDOWNERS?

Yes. The Nature Conservancy and Registry representatives will answer questions about the area and provide management advice and assistance.

A RESPECT FOR THE LAND: AN ILLINOIS TRADITION

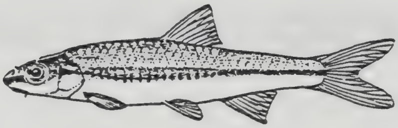
The Little Vermilion River Registry is founded on a long standing Illinois tradition of citizen-based conservation. Much of the conservation and restoration of natural areas is done through the efforts of citizen volunteers and landowners.

This approach makes sense— government cannot and should not be solely responsible for the preservation of our natural lands. In Illinois, many of the best natural areas are owned by citizens capable of protecting these natural features.

WHAT IS THE NATURE CONSERVANCY AND WHY ARE WE INVOLVED?

The Nature Conservancy is an international private, non-profit conservation organization dedicated to preserving natural diversity. The Illinois Chapter was founded in 1957 and has protected nearly 58,000 acres of significant natural areas with the support of over 30,000 members. The Little Vermilion River Registry is one of our newest efforts in Illinois to create an opportunity for landowners living in a globally significant ecosystem to protect and preserve Illinois' natural heritage.

Little Vermilion River Registry



In recognition of

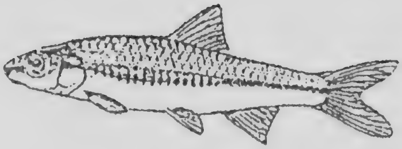
____

for the protection of
the **Little Vermilion River** and its corridor in
Section ___ in ________________ township
as a registered natural area with
The Nature Conservancy,
the Illinois Department of Conservation,
and the Illinois Nature Preserves Commission
on this ____ day of _______________, ________.
The owner is protecting and maintaining
the **Little Vermilion River**
as a high quality stream.

____
Director, The Nature Conservancy

____
Director, Illinois Department of Conservation

____
Director, Illinois Nature Preserves Commission



LITTLE VERMILION RIVER

Registered Natural Area

Please Do Not Disturb Plants or Wildlife

This land has been voluntarily preserved as part of the Little Vermilion Registry, an effort spearheaded by The Nature Conservancy and the Illinois Department of Conservation to help landowners protect and maintain the Little Vermilion River as a high quality stream. Entrance by permission only. For information, call (309) 673-6689.

The Nature Conservancy®

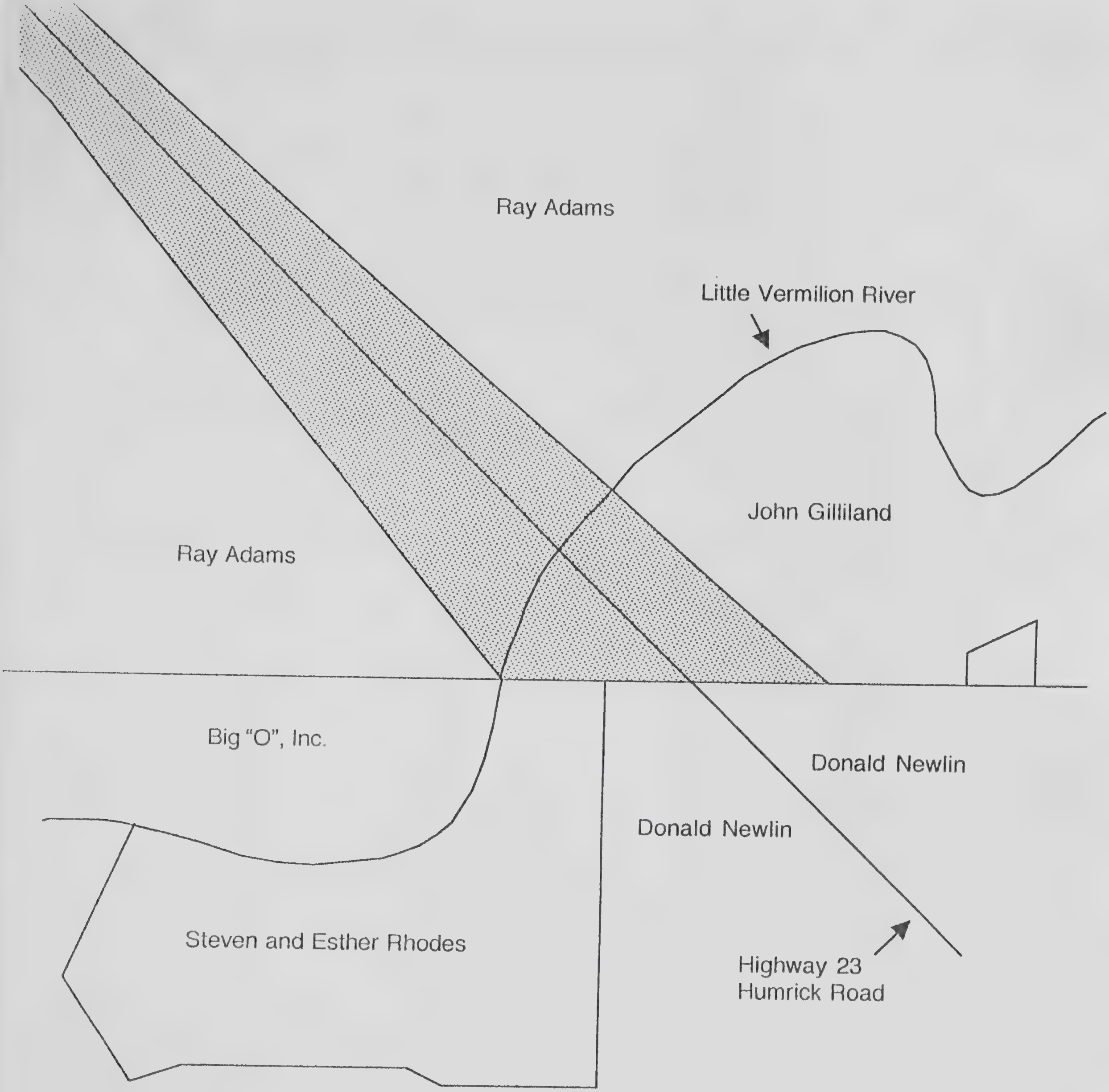


EXHIBIT I

IDOT Easements at Humrick Road Bridge ▨

Little Vermilion River Project Landowner Parcel Key 1995

parcel #	last name	first name	address
44	Witherspoon	Melvin and Lisa	R.R. 1 Box 275 Georgetown, Illinois 61846
40	Henderson	Steven and Patricia	R.R. 1 Box 274 (6672 on mailbox) Georgetown, Illinois 61846
42	Ott	Marion L. and Marie	R.R. 1 Box 277 Georgetown, Illinois 61846

EXHIBIT J

Recommended Deletions to Landowner List

EXHIBIT K

Landowner Contact Documents

Suzanne C. Smith
Environmental Consultant
2797 C.R. 1200 N • Homer, IL 61849 • (217) 896-2698

date

«first name» «last name»
«address»

Dear «letter name»,

Illinois is a state blessed with a rich history of many beautiful and diverse habitats, one of which is our rivers and their wooded corridors. Unlike the vast prairies which have virtually disappeared, our streams are still with us, providing shade in their broad reaching trees, cool water for fishing or swimming, and abundant wildlife. What memories does the Little Vermilion River bring to your mind?

The Little Vermilion River has been chosen as a model for the state of Illinois to determine if a registry of natural areas can be established. It is one of the top twelve rivers in the state because of its exceptional water quality and unusual animals. The River Chub fish and Slippershell mussel are only two examples of the unique life in this beautiful river.

The Nature Conservancy, a private, non-profit conservation organization, in partnership with the Illinois Department of Conservation hopes you will maintain and support the river's good health through voluntary landowner efforts. They have asked me to present some of the various voluntary opportunities available to you for protecting your land along the river. I would like to visit with you to discuss these opportunities, learn more about the river, and give you a packet of information. I will be contacting you by phone within the next few weeks to arrange a convenient time when we can get together for a few minutes to talk about the Little Vermilion.

I look forward to meeting you soon.

Sincerely,

Suzanne Smith
Environmental Consultant

PLEASE
R.S.V.P.

Dear ,

I have been unable to locate your phone number. Would you please take a minute to fill out the bottom of this sheet and slip it in the envelope so that I might call you to arrange a time when we can talk about the Little Vermilion River. Thank you.

Sincerely,

Suzanne Smith

- -

Name____

Address____

City,State,Zip____________________________________

Phone____

Little Vermilion River Project
Suzanne Smith

LITTLE VERMILION RIVER PROTECTION PROJECT 1994- LANDOWNER CONTACT

	NAME	LETTER SENT	PHONE CALL	1ST MEETING	COMMENTS

Literature Cited

Baird, G.C., S.D. Sroka, C.W. Shabica and T.L. Beard. 1985. Mazon Creek-type fossil assemblages in the U.S. midcontinent Pennsylvanian: their recurrent character and paleoenvironmental significance. B 311, pp. 87-99. Phil. Trans. R. Soc. Lond.

Page, L.M., K.S. Cummings, C.A. Mayer, S.L. Post, and M.E. Retzer. 1992. Biologically Significant Illinois Streams. pp. 382-400. Technical Report 1992 (1) Illinois Natural History Survey.

Sauer, R. 1989. Biological Survey of the Little Vermilion River. Unpublished Report. Illinois Department of Conservation.

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